

ABSTRACT OF THE DISCLOSURE

A semiconductor device includes: a semiconductor substrate having two types of active regions that are a PMOS region and an NMOS region separated from each other in plan view by a PN separation film; and a dual-gate electrode extending linearly across the PMOS region, the PN separation film and the NMOS region collectively on an upper side of the semiconductor substrate. The dual-gate electrode includes a P-type portion, an N-type portion and a PN junction positioned therebetween. The PN junction includes a silicide region. The silicide region is apart from both the PMOS region and the NMOS region and formed within the area of the PN separation film in plan view.